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(54) Title: **DIAMINE AND IMINODIACETIC ACID HYDROXAMIC ACID DERIVATIVES**

(57) Abstract: The present invention relates to a novel class of hydroxamic acid derivatives having a diamine or iminodiacetic acid backbone. The hydroxamic acid compounds can be used to treat cancer. The hydroxamic acid compounds can also inhibit histone deacetylase and are suitable for use in selectively including terminal differentiation, arresting cell growth and/or apoptosis of neo- plastic cells, thereby inhibiting proliferation of such cells. Thus, the compounds of the present are useful in treating a patient having a tumor characterized by proliferation of neoplastic cells. The compound of the invention are also useful in the prevention and treat- ment of TRX-mediated diseases, such as autoimmune, allergic and inflammatory diseases, and in the prevention and/or treatment of diseases of the central nervous system (CNS), such as neurodegenerative diseases. The present invention further provides pharma- ceutical compositions comprising the hydroxamic acid derivatives, and safe, dosing regimens of these pharmaceutical compositions, which are easy to follow, and which result in a therapeutically effective amount of the hydroxamic acid derivatives *in vivo*.